

table is found citations to the particular sections of this part where the material is incorporated. To enforce any edition other than the one listed in paragraph (b) of this section, notice of change must be published in the FEDERAL REGISTER and the material made available. All approved material is on file at the Office of the Federal Register, Washington, DC 20408, and at the U.S. Coast Guard, Lifesaving and Fire Safety Division (G-MSE-4), Washington, DC 20593.

(b) The materials approved for incorporation by reference in this subpart are:

AMERICAN SOCIETY FOR TESTING AND MATERIALS

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM B 117-73 (Reapproved 1979), Standard Method of Salt Spray (Fog) Testing.

ASTM C 177-76, Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Guarded Hot Plate.

ASTM C 518-76, Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter.

ASTM D 975-81, Standard Specification for Diesel Fuel Oils.

ASTM D 1004-66 (Reapproved 1976), Tear Resistance of Plastic Film and Sheeting.

FEDERAL STANDARDS SPECIFICATION UNIT (WFSIA)

Regional Office Building, Room 6039, 7th and D Streets SW, Washington, DC 20407.

National Bureau of Standards Special Publication 440—Color, Universal Language and Dictionary of Names; December 1976.

Federal Test Method Standard No. 191a dated July 20, 1978, Method 5304.1, Abrasion Resistance of Cloth, Oscillatory Cylinder (Wyzenbeek) Method, dated July 9, 1971.

Federal Standard No. 751a, Stitches, Seams, and Stitchings, dated January 25, 1965.

UNDERWRITERS LABORATORIES, INC.

12 Laboratory Drive, Research Triangle Park, NC 27709-3995.

UL 1191, First Edition (Standard for Components for Personal Flotation Devices), as revised March 29, 1977.

[CGD 84-069a, 52 FR 1188, Jan. 12, 1987, as amended by CGD 95-072, 60 FR 50467, Sept. 29, 1995; CGD 96-041, 61 FR 50733, Sept. 27, 1996; CGD 97-057, 62 FR 51048, Sept. 30, 1997]

§ 160.171-5 Independent laboratory.

The approval and production tests in this subpart must be conducted by an independent laboratory accepted by the Coast Guard under subpart 159.010 of this chapter.

§ 160.171-7 Approval procedures.

(a) *General.* An immersion suit is approved by the Coast Guard under the procedures in subpart 159.005 of this chapter.

(b) *Approval testing.* Each approval test must be conducted in accordance with § 160.171-17 or § 160.171-19.

(c) *Approval of child size and oversize adult suits.* No child size or oversize adult sized suit will be approved unless the adult size of the suit has been approved.

§ 160.171-9 Construction.

(a) *General.* Each immersion suit must be constructed primarily of a closed-cell flexible foam that meets the buoyancy and thermal insulation requirements in § 160.171-11 (a) and (c). Each suit must be designed to cover the wearer's entire body, except for the area of the nose and eyes. It must be capable of being worn inside-out or be clearly capable of being worn in only one way and, as far as possible, incapable of being donned incorrectly.

(b) *Impact resistance and body strength.* The body of each suit must be designed to allow the wearer to jump from a height of at least 4.5 m into the water without injury and without dislodging or damaging the suit.

(c) *Seams.* Stitching in each sewn structural seam of an immersion suit must be lock type stitching that meets the requirements in Federal Standard No. 751 for one of the following:

(1) Class 300 Lockstitch.

(2) Class 700 Single Thread Lockstitch.

Other stitches which are not true lock stitches may be used to reinforce a glued seam provided the adhesive alone has the required seam strength after the non-standard stitch has been removed.

(d) *Seam strength.* Each seam must have a strength of at least 225 Newtons (50 lb.).

(e) *Closures and seals.* Each closure and seal must be designed so that, following a jump from a height of not less than 4.5 m into the water, there is no undue ingress of water into the suit.

(f) *Hardware.* All hardware of an immersion suit must be of a size and design that allows ease of operation by